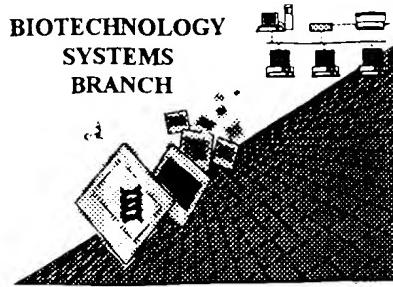


QTS-90  
0821

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/923,830  
Source: O1PE  
Date Processed by STIC: 8/16/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

### **Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§ 1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:  
<http://www.uspto.gov/web/offices/pac/checker>

**Raw Sequence Listing Error Summary**

<b>ERROR DETECTED</b>	<b>SUGGESTED CORRECTION</b>	<b>SERIAL NUMBER:</b> <u>09/923,830</u>
<b>ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE</b>		
1 <input checked="" type="checkbox"/> Wrapped Nucleic Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <input type="checkbox"/> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <input type="checkbox"/> Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <input checked="" type="checkbox"/> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <input type="checkbox"/> Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <input type="checkbox"/> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <input type="checkbox"/> Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (ii) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped	
8 <input type="checkbox"/> Skipped Sequences (NEW RULES)	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
9 <input checked="" type="checkbox"/> Use of n's or Xaa's (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
10 <input checked="" type="checkbox"/> Invalid <213> Response	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
11 <input type="checkbox"/> Use of <220>	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or Artificial Sequence	
12 <input type="checkbox"/> PatentIn 2.0 "bug"	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
13 <input type="checkbox"/> Misuse of n	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/923,830

Input Set : A:\ES.txt

Output Set: N:\CRF3\08162001\I923830.raw

DATE: 08/16/2001

TIME: 13:38:20

3 <11> APPLICANT: Nienaber, Vicki  
 4 Greer, Jonathan  
 5 Akad-Capatero, Celerino  
 6 Nierbeuk, Daniel  
 7 <12> TITLE OF INVENTION: LIGAND SCREENING AND DESIGN BY X-RAY  
 8 CRYSTALLOGRAPHY  
 11 <13> FILE REFERENCE: 6308.US.P1  
 12 <14> CURRENT APPLICATION NUMBER: US/09/923,830  
 13 <141> CURRENT FILING DATE: 2001-08-07  
 13 <150> PRIORITY APPLICATION NUMBER: 09/036,184  
 14 <151> PRIORITY FILING DATE: 1998-03-06  
 16 <160> NUMBER OF SEQ ID NOS: 14  
 18 <170> SOFTWARE: FastSEQ for Windows Version 3.0

All item 4  
 On Error  
 summary  
 Does Not Comply  
 Corrected Diskette Needed

pp 1-3

## ERRORED SEQUENCES

10 <11> SEQ ID NO: 1  
 11 LENGTH: 31  
 12 <11> TYPE: DNA  
 13 <11> ORGANISM: Synthetic

(global error)

14 <11> SEQUENCE: 1  
 15 <11> SEQUENCE: 1  
 E--> 26 attaatgtcg actaaggagg ttagtctaattg taaaatttc agtgtggcca a  
 17 <11> SEQ ID NO: 2  
 18 <11> LENGTH: 57  
 19 <11> TYPE: DNA  
 20 <11> ORGANISM: Synthetic

51 sheet

see item 1

On Error

summary

sheet

(global format  
error)

E--> 35 attaataaagc ttccatgggg ccaggccatt ctcttcattt gtgtgactcc tgatcca  
 36 <11> SEQ ID NO: 3  
 37 <11> LENGTH: 47  
 38 <11> TYPE: DNA  
 39 <11> ORGANISM: Synthetic

same error

E--> 44 attaattgcg cagccatccc ggactataca gaccatcgcc ctgcctt  
 45 <11> SEQ ID NO: 4  
 46 <11> LENGTH: 46  
 47 <11> TYPE: DNA  
 48 <11> ORGANISM: Synthetic

same

E--> 53 attaatcaga tgatccggat agagatagtc ggttagactgc tttttt  
 54 <11> SEQ ID NO: 5  
 55 <11> LENGTH: 38

same

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/923,830

DATE: 10/16/2001  
TIME: 13:39:23

Input Set : A:\ES.txt

Output Set: N:\CRF3\08162001\I923830.raw

62 - 210 &gt; TYPE: DNA

63 - 211 &gt; ORGANISM: Synthetic

64 - 212 &gt; SEQUENCE: 5

E--&gt; 62 attaatcagc tgaaaatgac tgggtgta

*done*

65 - 210 &gt; SEQ ID NO: 6

66 - 211 &gt; LENGTH: 51

67 - 212 &gt; TYPE: DNA

68 - 213 &gt; ORGANISM: Synthetic

70 - 214 &gt; SEQUENCE: 6

E--&gt; 71 attaatgtcg actaaggagg tggatctaatttcaatggccaa a

*done*

72 - 210 &gt; SEQ ID NO: 7

73 - 211 &gt; LENGTH: 37

74 - 212 &gt; TYPE: DNA

75 - 213 &gt; ORGANISM: Synthetic

79 - 400 &gt; SEQUENCE: 7

E--&gt; 80 attaatgtctt gcctcgagcc accatgagag cccgtgt

*done*

81 - 210 &gt; SEQ ID NO: 8

84 - 211 &gt; LENGTH: 42

85 - 212 &gt; TYPE: DNA

86 - 213 &gt; ORGANISM: Synthetic

88 - 400 &gt; SEQUENCE: 8

E--&gt; 89 attaatgtctt gcctcgagtc actttttgttgc actggggatca

*done*

90 - 210 &gt;

92 - 211 &gt; SEQ ID NO: 9

93 - 212 &gt; LENGTH: 44

94 - 213 &gt; TYPE: DNA

95 - 213 &gt; ORGANISM: Synthetic

97 - 400 &gt; SEQUENCE: 9

E--&gt; 98 ggtggtaat tctcccccaa taatgccttt ggagtcgttc acga

*done*

99 - 210 &gt;

101 - 211 &gt; LENGTH: 111

103 - 212 &gt; TYPE: DNA

104 - 213 &gt; ORGANISM: Yeast Sichia Pasteria

106 - 400 &gt; SEQUENCE: 10

E--&gt; 107 atgttctctc caattttgtc cttggaaatt attttagctt tggctacttt gcaatctgtc

108 -

E--&gt; 109 ttccgtcagc cagtttatctg cactaccgtt gttccgtc ccggaggatc c

*done*

110 - 211 &gt;

112 - 210 &gt; SEQ ID NO: 11

113 - 211 &gt; LENGTH: 22

114 - 212 &gt; TYPE: DNA

115 - 213 &gt; ORGANISM: Synthetic

117 - 400 &gt; SEQUENCE: 11

E--&gt; 118 gaaacttcca aaagtgcgtca ta

119 - 210 &gt;

*done*

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/923,830

DATE: 8/16/01  
TIME: 13:38:20Input Set : A:\ES.txt  
Output Set: N:\CRF3\08162001\I923830.raw

121 <210> SEQ ID NO: 12  
 122 <211> LENGTH: 92  
 123 <212> TYPE: DNA  
 124 <214> ORGANISM: Synthetic  
 126 <400> SEQUENCE: 12  
 E--> 127 attaatgaat ttttcgagcg gtccgggatc cctcggcagc ggaaccaacg gtagtgcaga      *None*  
 E--> 129 taactggctg agcgaagaca gattgcaaag ta  
 130 42  
 132 <210> SEQ ID NO: 13  
 133 <211> LENGTH: 46  
 134 <212> TYPE: DNA  
 135 <213> ORGANISM: Synthetic  
 137 <400> SEQUENCE: 13  
 E--> 138 attaatggat ctttgacaa gaggattttt gggggagaat tcacca      *None*  
 139 46  
 141 <210> SEQ ID NO: 14  
 142 <211> LENGTH: 47  
 143 <212> TYPE: DNA  
 144 <213> ORGANISM: Synthetic  
 146 <400> SEQUENCE: 14  
 E--> 147 attaatctcg agcggtccgt cacttgtgt gactgcgaat ccagggt      *None*  
 E--> 150 43  
 E--> 152 6308.us.d1  
 E--> 156 43  
 E--> 157 -  
 E--> 158 43  
 E--> 160 43  
*delete*

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/923,830

DATE: 10/20/01

TIME: 13:07:01

Input Set: A:\ES.txt  
Output Set: N:\CRF3\08162001\I923830.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:26 M:154 E: No. of Bases conflict, LENGTH:Input:0 Counted:11 SEQ:1  
L:36 M:114 E: No. of Bases conflict, LENGTH:Input:0 Counted:47 SEQ:2  
L:44 M:114 E: No. of Bases conflict, LENGTH:Input:0 Counted:47 SEQ:3  
L:53 M:264 E: No. of Bases conflict, LENGTH:Input:0 Counted:46 SEQ:4  
L:62 M:114 E: No. of Bases conflict, LENGTH:Input:0 Counted:18 SEQ:5  
L:71 M:154 E: No. of Bases conflict, LENGTH:Input:0 Counted:51 SEQ:6  
L:80 M:114 E: No. of Bases conflict, LENGTH:Input:0 Counted:37 SEQ:7  
L:89 M:214 E: No. of Bases conflict, LENGTH:Input:0 Counted:42 SEQ:8  
L:98 M:264 E: No. of Bases conflict, LENGTH:Input:0 Counted:44 SEQ:9  
L:107 M:154 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:10  
M:214 Repeated in SeqNo=10  
L:118 M:154 E: No. of Bases conflict, LENGTH:Input:0 Counted:22 SEQ:11  
L:127 M:154 E: No. of Bases conflict, LENGTH:Input:0 Counted:66 SEQ:12  
M:254 Repeated in SeqNo=12  
L:136 M:264 E: No. of Bases conflict, LENGTH:Input:0 Counted:46 SEQ:13  
L:147 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:47 SEQ:14  
M:254 Repeated in SeqNo=14  
L:152 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:0  
L:152 M:112 C: (48) String data converted to lower case,  
L:157 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1  
L:160 M:252 E: No. of Seq. differs, <211>LENGTH:Input:47 Found:53 SEQ:14